Guidelines for Responding to a Chemical Weapons Incident

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Preface

This **"Guidelines for Responding to a Chemical Weapons Incident"** document has been developed by the Domestic Preparedness Program (DPP). Through the U.S. Army Soldier and Biological Chemical Command (SBCCOM), Chemical Weapons Improved Response Program (CWIRP), members of the Law Enforcement, Health and Safety, and the Emergency Response Functional Groups designed these guidelines with the intent to give assistance to all response personnel in dealing with critical incident management decisions consistent with an actual chemical weapons (CW) emergency response.

These guidelines are neither mandated nor required procedures for response to the scene of a chemical terrorism incident. Rather, they are presented to provide technical and operational guidance for those agencies wishing to improve their response and related operations should a CW incident occur in their community. The focus of these guidelines was to validate the procedures and recommendations

developed through the series of emergency response technical reports that have already been published by the CWIRP. That validation process was conducted via a forum consisting of representatives from the fire, Emergency Medical Services (EMS), police, and health and safety communities.

We encourage all agencies and jurisdictions to review the data, understand the implementations, and determine if your agency and jurisdiction will use these guidelines as part of your decision-making process during a CW incident. Once you have made the decision that is best for your community, you should establish plans, policies, and training for your personnel in all aspects against the threat of a CW attack.

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9-1-1 Operators

The 9-1-1 Communications Center presents the first opportunity to identify that a potential chemical incident exists. A chemical terrorist attack will most likely yield an abundance of calls for assistance. Through close scrutiny of the information provided and rapid cross-checking of the numerous reports, a well-trained operator should be alerted to the possibility that the incident is not routine in nature. Identifying the incident and relaying this potential threat information and precautionary measures to **all** of the responding units may be the key to saving the lives of many of the first responders on the scene.

Indicators of a Possible Chemical Weapons Incident

- Explosion with little or no structural damage
- Reports of a device that dispersed a mist or vapor
- Multiple casualties exhibiting similar symptoms

- Mass casualties with no apparent reason or trauma
- Reports of unusual odors, liquids, spray devices, or cylinders
- Dead animals
- Discarded personal protective equipment (PPE)

Questions for the Caller

- What is your name and address and the phone number you are calling from?
- What is the location of the incident?
- Was there a fire or explosion?
- Did you hear any hissing or spraying?
- Was there any mist or liquid dispersed?
- Is anyone injured or sick?
  - How many?
  - What are their symptoms and complaints?
- Is the incident inside or outside of a building?

- What is the type of structure where the incident occurred?
- Did you see anyone or anything suspicious?
- Did you see anyone wearing protective clothing (e.g., mask, gloves, chemical suits)?
- Can you describe the perpetrator or a getaway vehicle?

Dispatch Notifications

Dispatch

- Fire
- Police and shift supervisor
- Emergency Medical Services (EMS)
- Hazardous materials (HAZMAT)

Update Responding Units

- Provide responding units of any new information
- Provide special response routes of travel (upwind/upgrade)
- Provide special instructions or precautions (e.g., use of PPE, report to staging areas)
- Provide weather updates, wind direction, and speed

- Provide any description of perpetrators and getaway vehicles (e.g., warn of potential contamination, additional devices on perpetrators)
- Provide number of victims, their signs, and symptoms

Notifications

- Local Federal Bureau of Investigation (FBI) office – weapons of mass destruction (WMD) coordinator
- Office of Emergency Management (OEM)
- Notify local health department; give information
  - Agent information
  - Patient signs and symptoms
  - Number of casualties
  - Notify hospitals, clinics, and healthcare facilities

  - Consider establishment of off-site treatment center

- Notify local Environmental Protection Agency (EPA)

- Department of Public Works and Highways

Actions on Arrival

Whether pre-warned of a potential chemical incident or by recognizing it on arrival at the incident scene, responders should take several immediate steps to protect themselves. With proper precautions and protective equipment, responders are able to effectively perform rescue operations and scene management safely.

- Approach upwind and upgrade of the incident
- Stop at a distance and collect information
- Alert follow-on responders
- Direct all personnel to use full PPE and self-contained breathing apparatus (SCBA)
  - At a minimum, respiratory protection
- Be aware of possible secondary devices
- Consider that the perpetrator may still be on the scene
- This is a crime scene
  - Restrict entry

  - Preserve evidence
- Avoid contact with liquids
- Request
  - HAZMAT, EMS, rescue, police, bomb squad, mutual aid, and other resources

Fire Department

On arrival, fire department units will immediately be faced with mass casualties (e.g., trauma, chemically contaminated, and psychosomatic) as well as major scene and command and control challenges. The fire response and Incident Command System (ICS) will be severely tested by the magnitude of the incident. Rapid employment of the elements of a chemical incident response is essential to protect life.

- Establish Incident Command
- Establish communications
- Secure, isolate, and deny entry to area
- Establish safety zones
- Establish water supply, hose lines, and suppression duties
- Identify if live victims remain in the area of attack
- Rescue live victims
- Establish casualty collection points (CCPs)

- Perform mass decontamination, triage, and treatment of victims
- Monitor and maintain water runoff

Incident Command

The decisions that the Incident Commander (IC) makes during the first 10 to 15 minutes of the response are the key to both protecting responders and saving lives of the victims of the attack. The ability to recognize critical needs and prioritize the limited resources available to perform them requires a thorough knowledge of chemical incident response procedures and the threats and dangers of the potential agents. It is also critical to the safety of everyone on the incident and overall success of the incident response that all agencies operate as a Unified Command, not a series of individual agency command posts.

- Establish command post upwind and upgrade away from direct involvement with victims, responders, or emergency response vehicles

- Give detailed situation report of:

  - Estimated number of casualties
  - Location of hot, warm, and cold zones
  - Recommendations for PPE

- Request additional resources immediately
- Establish a dedicated radio channel or direct telephone line with the Emergency Dispatch and Communications Center
- Consider the threat of secondary devices
- Establish a decontamination area for civilian victims and another for technical decontamination of responders, equipment, and evidence collection
- Request communications and dispatch to notify hospitals of mass casualties and the possibility of contaminated victims who have left the scene showing up at their facilities
- Establish accountability of all responders on scene
- Request that a supervisor or senior ranking law enforcement officer report to the command post
- Alert all personnel that the incident is a crime scene and to use caution to preserve suspected evidence, if possible

- Coordinate rescue operations with law enforcement
- Ensure law enforcement advises on activities being conducted in the immediate area:
  - Search for secondary devices
  - Evaluate and perform render-safe procedures (RSPs) on devices
  - Investigation requirements

Fire Department Sector Assignments

- Safety
- EMS and triage
- Water
- HAZMAT
- Public Information Officer (PIO)
- Decontamination
- Accountability
- Rehabilitation
- Staging
- Operations
- Police liaison

Casualty Rescue

The threat of cross-contamination of victims through contact with liquid agent or residue continues even after the initial agent release. The rapid removal of casualties from the contamination, triage, and decontamination areas is essential to reducing additional agent-related injuries. ICs must make rapid decisions on casualty rescue based on protective equipment available and an evaluation of the contamination threat. As many ambulatory casualties as possible should be removed from the area without rescuers entering the incident site. It should be expected, though, that live, nonambulatory casualties will be present at any chemical incident.

** Additional information on guidelines for rescue operations is available in **"Risk Assessment of Using Firefighter Protective Ensemble with Self-Contained Breathing Apparatus for Rescue Operations During a Terrorist Chemical Agent Incident."** A copy of this report can be obtained at the following Web site:*
http://www.ecbc.army.mil/hld/ip/reports.htm.

- Use bull horns and vehicle public address (PA) system to give directions
- Be alert for secondary devices
- Establish communications with command post
- Determine if there are live victims in the contaminated area
- Use PPE options for rescue:
  - Level-A HAZMAT suit with SCBA
  - Tyvek suit underneath firefighter turnout gear; all cuffs and closures with SCBA
  - Firefighter turnout gear with SCBA

***The IC evaluates the chemical threat, potential to save lives, risk to responders, and time constraints to achieve each level of responder protection before determining what level of PPE to use to perform rescue operations.**

- Decide to rescue or wait for HAZMAT to arrive

- Notify command post, emergency management, and health department with estimated number of victims

- **Avoid contact with liquids**

***Responders need to be aware that the closer they are to the point of dissemination of the agent the more likely they are to expose themselves to liquid contamination. Additionally, responders should avoid contact with any deceased based on the threat of liquid contamination and the fact that they are part of the crime scene.**

- Assist and direct all victims to decontamination and triage area

Decontamination

For decontamination to be beneficial to the exposed victims of a chemical incident, it must be performed within minutes of the agent exposure; however, decontamination after the initial exposure is necessary to reduce the possibility of agents on the clothing or skin. This is essential to protect responders and other victims from cross-contamination. Studies have been done looking at the advantages of using soaps, detergents, and bleach in the decontamination process; however, the only decontaminant expected to be immediately available to the first responder is water. The theories and procedures referred to by the Chemical Weapons Improved Response Program (CWIRP) are based on decontaminating victims using large volumes of water.

***** *Additional information may be found in the* ***"Guidelines for Mass Casualty Decontamination During a Terrorist Chemical Agent Incident."*** *A copy of this report can be obtained at the SBCCOM Web site:*
http://www.ecbc.army.mil/hld/ip/reports.htm.

- Establish decontamination locations upwind and upgrade of the incident
- Decontamination personnel must wear PPE/SCBA
  - Firefighters recommended turnout gear with SCBA
  - EMS recommended turnout gear with SCBA or Level C
  - Police recommended Level C

***Level C protection recommended for decontamination consists of full-face, negative pressure respirator with Clean Water Act (CWA) filters, full body chemical protection suit (e.g., tyvek or similar [not charcoal lined] military style due to potential to exposure to water) with integral hood and foot covers, butyl rubber gloves, and overboots.**

- Be alert for secondary devices, weapons, and perpetrators

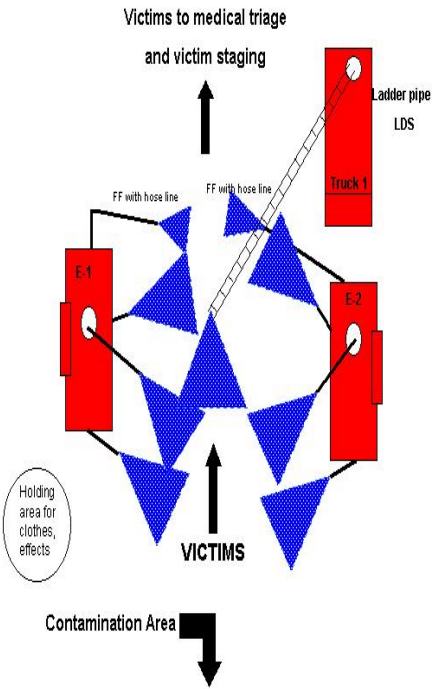
- Request police for security of personnel, victims, personal property, and collection and preservation of evidence
- Avoid contact with unknown liquids
- Decontaminate **(immediately)** casualties with liquid contamination on their skin or clothing
- Clothing removal is decontamination. Encourage victims to remove clothing at least down to their undergarments
  - Bag and tag personal belongings
- Prioritize asymptomatic, symptomatic, and nonambulatory casualties
- Coordinate decontamination with EMS triage activities
- Establish separate technical decontamination for responders away from mass-casualty decontamination

Concerns of Mass Decontamination

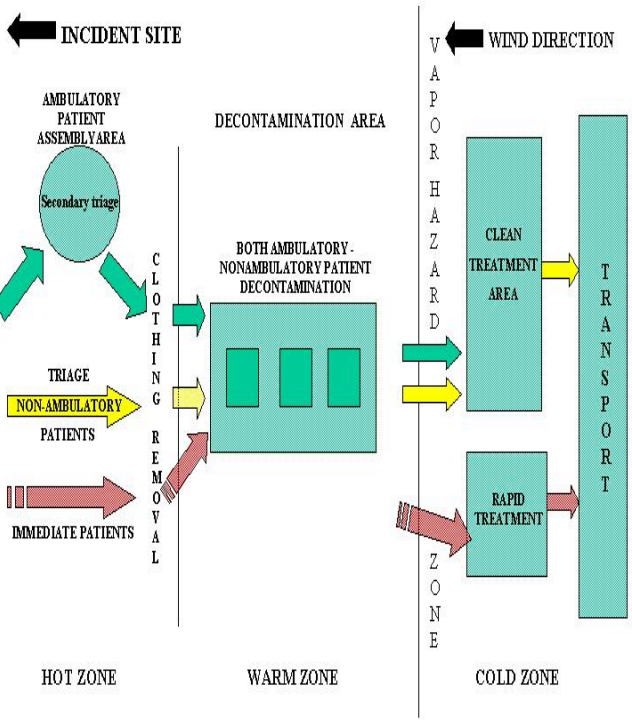
- Requires large volumes of water

- Containment of contaminated water runoff
  - Saving lives takes priority
  - Attempts to control runoff and environmental damage should be made as control of the situation is gained
  - Notify health department and EPA
- Weather and wind conditions
- Decontamination corridors are ideal targets for secondary devices
- Perpetrators may be among victims
- Victim identification and tracking
- Prioritization for decontamination based on medical conditions and likelihood of contamination
- Factors that determine the highest priority for ambulatory victim decontamination
  - Casualties closest to the point of release

  - Casualties reporting exposure to vapor or aerosol
  - Casualties with evidence of liquid deposition on clothing or skin
  - Casualties with serious medical symptoms (shortness of breath, chest tightness etc.)
  - Casualties with conventional injuries
- Security of personal property and clothing
- Security of sensitive equipment (e.g., police officers' weapons)
- Separation of male and female victims
- Determine method of water application
  - Must provide large quantity of water
  - Handheld hose lines
  - Aerial towers
  - Ladder Pipe Decontamination System (LDS)
  - Emergency Decontamination Corridor System (EDCS)



Ladder Pipe Decontamination System



Emergency Decontamination Corridor System

Types of Decontamination

- Passive (clothing removal)
- Dry agents
  - Dirt
  - Flour
  - Baking powder
  - Sawdust
  - Charcoal
  - Silica gel
- Wet agents
  - Soap and water
  - Water (only)
  - Bleach (equipment decontamination)
- Air decontamination (positive pressure ventilation [PPV]/portable fans)

Decontamination Resource Needs

- Engine companies to establish, maintain, and apply water

- Truck companies for ladder pipe and ventilation duties
- Ambulances and EMS personnel for treatment and transport of victims after decontamination
- Police for security and control
- Tracking of victims and personal property
- Dry clothing and blankets
- Department of Public Works (DPW) and highways for traffic control devices, sand bags, and equipment
- Alternate transportation methods for victims
  - Only casualties who have undergone gross decontamination on site
  - Mass transit vehicles used
  - Triage green only
  - Transport to alternative care facility (ACF)
  - Medical personnel to accompany each transport

- Drivers with Level C PPE

***Level C PPE recommended for transport drivers consists of full-face, negative pressure respirator, full body chemical suit (tyvek or charcoal lined), chemical, and/or biological protective gloves**

- Relief crews for all emergency personnel

Technical Decontamination

Technical decontamination refers to the detailed decontamination (e.g., wash, rinse, underlying procedures) used by specialized teams, most notably HAZMAT. It is recommended that at least one technical decontamination area be set up to support the special response teams that operate in the hot and warm zones. This includes law enforcement response and investigative teams.

- Established separate from victim decontamination
- Firefighters
- EMS providers
- HAZMAT technicians
- Bomb squad
- Law enforcement
- Civilian workers

- Evidence
- Equipment
- Vehicles
- Be prepared to provide decontamination support during recovery operations

***The establishment of technical decontamination stations can become both a confusing and space absorbing process. Many organizations with technical decontamination capabilities insist on using their own decontamination assets rather than using already established technical decontamination corridors manned by local HAZMAT responders. The IC should be aware of this and plan accordingly. As multiple mutual-aid and state and federal response teams converge on the incident scene, technical decontamination can become a space use nightmare. Best practices involve use of personnel and specialized equipment from responding agencies on an already established technical decontamination corridor.**

HAZMAT Team

Missions performed by HAZMAT teams on a chemical incident will predominantly be the same as a normal HAZMAT response. However a deliberate chemical attack will most likely yield many more casualties, occur in a densely populated area or a large gathering, and be a criminal act. HAZMAT operations must be closely coordinated with law enforcement.

- Approach upwind and upgrade of the incident
- Wear Level A HAZMAT PPE/SCBA
- Identify the chemical agent using test detection equipment and patient symptoms
- Collect samples for laboratory analysis
- Avoid contact with liquids
- Be alert for secondary devices
- Consider perpetrator may still be on scene

- Establish
  - Communications with command post
  - Safety, hot, warm, and cold zones
  - Casualty holding area
  - Technical decontamination for responders, evidence, equipment, and apparatus
- Provide area monitoring during response operations
- Provide equipment monitoring during recovery operations

Emergency Medical Services

The greatest challenges facing EMS on a chemical incident will be the number of actual casualties (e.g., trauma and agent exposure)—segregating these casualties from nonexposed victims and performing triage and possibly minor medical intervention while in a contaminated environment.

Determine proper level of PPE and respiratory protection needed for EMS personnel in their assigned work area.

***PPE recommended for EMS operating in warm zone consists of either turnout gear with SCBA or Level C consisting of tyvek style overgarment with hood and foot cover, full-face, negative pressure respirator, butyl rubber gloves, and overboots. PPE for operating in cold zone Level C, as described above.**

- Be alert for secondary devices and perpetrators

- Avoid contact with liquids
- Rapid prioritization of number of patients
- Triage victims based on medical necessity
  - Mass-casualty incident (MCI) protocols
  - Simple Triage and Rapid Treatment (START) system
  - Segregate victims and coordinate decontamination prioritization with fire department and HAZMAT based on:
    - Triage categorization
    - Likelihood of agent exposure
- Establish patient identification and tracking
- Collect victim personal property
- Turn personal property over to law enforcement for security
- Establish
  - Communications with command post and hospitals

  - Staging for EMS personnel, ambulances, supplies, and resources
  - Transportation area

- Direct walking wounded to a designated on-site CCP
- Transport yellow and red-tagged triage patients to medical treatment facility using emergency medical transports
- Transport green-tagged triage patients to ACF using mass transit assets

Patient Segregation

Unlike most MCIs, victims of a chemical incident need to be evaluated not just on their medical condition (standard MCI triage protocols), but their likelihood of contamination must be considered in determining priority for decontamination.

- Ambulatory casualties: Able to understand directions, talk, and walk unassisted
- Nonambulatory casualties: are unconscious, unresponsive, or unable to move unassisted
- All patients need to be tracked by identification and documentation and be tagged or marked prior to decontamination

Decontamination Prioritization

- Casualties closest to the point of release
- Casualties with reported exposure to vapor or spray

- Casualties with liquid agent contamination to clothing or skin
- Casualties with serious medical symptoms (e.g., shortness of breath and chest tightness)
- Casualties with conventional injuries
- Casualties with no visible signs or symptoms of agent exposure and no conventional injuries

Decontamination for final category is more for psychological than medical reasons.

***** *Additional information may be found in the* ***"Guidelines for Mass Casualty Decontamination During a Terrorist Chemical Agent Incident."*** *A copy of this report can be obtained at the following Web site:*
http://www.ecbc.army.mil/hld/ip/reports.htm.

Hospital Notification

Community medical systems are faced with managing two principal populations when responding to a chemical incident: those transported from the incident scene and those who self-refer. In the case of the Tokyo subway sarin attack, the majority of the people seeking medical attention were self-referred. Timely notification of the incident and subsequent updates on the suspected and known agent as well as treatment protocols are essential to hospital safety and patient care.

- Notify
  - Staff
  - Doctors
  - Nurses
  - Security
  - Emergency department (ED)
  - Maintenance department
- Estimate number of casualties

- Alert hospital of possible self-referrals
- Suggest hospitals establish decontamination procedures for walk in-patients using hospital personnel
- Give suspected agent information
- Advise of treatment protocols
- Caution hospital staff to use protective measures

*** PPE recommended for hospital personnel performing decontamination operations and casualty care and triage prior to decontamination should be Level C protection consisting of tyvek type suit with integrated hood (not charcoal lined suits) and foot covers, full-face, negative pressure respirator, butyl rubber gloves, and overboots.**

Casualty Processing

- Patient identification and tracking

- Observe/report victim symptoms of agent exposure
- Patient transport
- Determine if number of casualties exceeds the capabilities of existing healthcare systems
  - Off-Site Triage, Treatment, and transportation Center (OST^3C) needs to be established
- Identify needs for long-term patient tracking
- Establish critical incident stress debriefing (CISD) team for victims

Hospital Actions

- Lock down the hospital to avoid contamination and subsequent hospital shutdown
- Establish single entry and egress point
- Establish ICS
- Establish a triage area outside of the facility

- Provide a decontamination station outside the facility with fire hose/stand pipe
- Integrate local EMS tag and triage system into the hospital method for catastrophic care
- Wear the appropriate level of PPE
- Identify accurate bed availability
- Use pre-established medical treatment protocols for chemical WMD
- Initiate patient evacuation plans; relocate patients to other areas inside the hospital or to other rehabilitation hospitals
- Establish and maintain communications with the health department and Emergency Operations Center (EOC)
  - Share casualty information
  - Mitigate effects of the incident
  - Exchange update information

Off-Site Triage, Treatment, and Transportation Center

There may be a large number of people at a chemical incident who are not exposed to the agent and who will still seek some form of treatment. To allow the existing medical system to provide care for those who need it most, communities should consider establishing an alternative treatment center for the less serious and "worried well" population. An evaluation of the impact of the casualties on the medical system and the decision to open an alternative treatment center should be made between the IC, public health officer, and the emergency manager.

** Additional information on guidelines for establishing an OST^{3}C is available in the CWIRP Report* ***"Alternative Health Care Facility: Concept of Operations for the Off-Site Triage, Treatment, and Transportation Center (OST^{3}C)".*** *A copy of this report can be obtained at the following Web site:* http://www.ecbc.army.mil/hld/ip/reports.htm.

Activate OST^{3}C

- Determine facility and location
- Appoint staffing
  - Administrative
  - Operational
  - Support
- Equipment, supply, and antidote caches
- Security
- Establish warm and cold zones
- Coordinate ambulances and alternate transportation
- Establish a temporary morgue

OST^{3}C Facility Requirements

- Tables, chairs, beds, televisions, PA systems, and chalk and dry erase boards
- Bathrooms

- Cafeteria
- Auditorium and large open room area for briefings
- Locker rooms; showers for males and females
- Parking facilities and large fields
- Good access roads
- Telephones and electricity
- Heat and air-conditioning

OST^{3}C Patient Flow

- Perimeter security
- Initial triage
- Gross decontamination required (if not decontaminated at the incident site)
- Registration
- Detailed decontamination
- Redress and secondary triage
- Treatment

- Data collection and law enforcement investigation
- Replenishment area and cafeteria
- Victim assistance
- CISD

Fatality Recovery and Management

Residual contamination and difficulty in verifying that a body is completely decontaminated require special considerations in both body recovery and decisions on returning remains to the family members.

Additional information is available in a report titled ***"Guidelines for Mass Fatality Management During Terrorist Incidents Involving Chemical Agents," A copy of this report can be obtained at the following Web site:***
http://www.ecbc.army.mil/hld/ip/reports.htm.

- Establish communications and coordination between command post, law enforcement, medical examiner (ME), and public health
- Deceased victims are evidence of the crime scene
- Deceased victims remain in place until released by lead law enforcement agency and the ME

- Personnel processing deceased need appropriate PPE based on contamination threat

*** PPE recommendation for body recovery operations should be made based on results of HAZMAT monitoring conducted at the incident scene. If law enforcement and ME personnel enter the area prior to HAZMAT determining the type and concentration of agent, Level A PPE should be worn.**

- Be alert for secondary devices and booby traps
- Establish decontamination area for deceased
- Identify, tag, and track deceased and their personal property
- Establish a temporary morgue
- Request Disaster Mortuary Operational Response Team (DMORT) clergy, and CISD team
- Prepare information for funeral homes regarding agent and dangers of handling the bodies

- Determine if bodies can be released to families

Law Enforcement

A chemical weapons attack will pose unique challenges to each level of the law enforcement response. Even though the FBI has jurisdiction over domestic WMD incidents, the initial response falls on the local police departments. The size of the initial scene perimeter (due to vapor hazards), operating in personal protective clothing and evaluating and processing a contaminated crime scene are only some of the key challenges facing law enforcement.

- Establish police command
- Establish communications between fire department IC and police commander
- Establish personnel and equipment staging area
- Be alert for secondary devices, weapons, and perpetrators
- Ensure appropriate PPE is worn based on mission, hazard zone of operation, and the likelihood of contamination

*** PPE recommended for law enforcement officers operating on the perimeter of a chemical incident consists of Level C, tyvek type, or charcoal lined full body chemical suit, full-face negative pressure respirator, overboots, and butyl gloves with police gear worn over the chemical protective suit.**

Officers operating in the decontamination corridor should wear the above minus the option of a charcoal lined suit.

- Police commander assigns additional duties for patrols
- Begin investigation

Additional information regarding PPE recommendations for officers is available in a report titled* *"Guidelines for Use of Personal Protective Equipment by Law Enforcement Personnel During A Terrorist Chemical Agent Incident,"*** *A copy of this report can be obtained at the following Web site:* http://www.ecbc.army.mil/hld/ip/reports.htm.

*** Identification of law enforcement officers in PPE is an issue of concern. Using vests and writing department names on suit with markers can be readily duplicated by perpetrators seeking to gain access to, or escape from, the incident scene. Careful consideration must be given to officer identification in PPE.**

Law Enforcement Roles

Basically, the roles that law enforcement will perform on a chemical incident are the same as for any crime scene. However, due to the nature of the event, level of training, availability of protective equipment, and special equipment requirements, local departments may not be able to perform several tasks. It is imperative that officers always operate within their level of training and protective equipment when dealing with a chemical incident, response, and investigation.

- Traffic and crowd control outer perimeter
- Crowd control in decontamination area
- Security
  - Site access
  - Responders and victims
  - Victim's personal belongings
  - Law enforcement sensitive equipment

  - Evidence
- Crime scene processing
- Evidence collection and decontamination
- Witness interviews
- Multiagency communications
- Suspect detention
- Long-term site security

Patrol

The first key element to a successful response to a chemical incident and to providing for officers' safety is rapid identification of the hazard and immediately gaining control over the responding units. The normal tendency to rush onto the scene to assist victims must be controlled. It is possible that officers on scene at the time of an attack, or the first arriving officers, could become casualties. A call to assist an officer in distress must be handled differently in a chemical incident or a large part of the immediate response force may be lost.

***Additional information will be available in a report titled "**Guidelines for Use of Personal Protective Equipment by Law Enforcement Officers During A Terrorist Chemical Agent Incident,"** A copy of this report can be obtained at the following Web site:* http://www.ecbc.army.mil/hld/ip/reports.htm.

- Senior officer will assume on-scene command

- Notify command and responding units of situation
- Designate areas for responding patrols to report to staging area
  - Verify levels of PPE before responding to scene
- Establish liaison with Incident Command and command post
- Identify manpower requirements
- Establish scene control
- Control additional responding units
- Get advice from fire department on contaminated zones, safe zones, and PPE requirements
- Do not enter the contaminated area

Bomb Squad

Bomb technicians routinely operate in a highly dangerous environment with sophisticated equipment; however, none of this standard equipment provides protection from chemical agent hazards. Protective suits and specialized equipment for bomb technicians are limited; however, a chemical incident is likely to require them to operate in a contaminated environment and dispose of devices that may contain chemical agents. Police and fire commanders, bomb squads, and HAZMAT teams need to work together to formulate and rehearse plans for dealing with these types of problems.

- Establish communications with fire command, HAZMAT, and police command
  - Ensure actions are coordinated with each level of command
- Establish bomb squad staging area equipment/vehicles
- Identify appropriate PPE needed for agent hazard

  - Reconnaissance may be conducted in chemical or biological (C/B) protective clothing only
    - In areas where HAZMAT has not been determined, agent type and concentration Level A protection (fully encapsulating suit and SCBA) is warranted
    - If HAZMAT has identified agent and concentration, coordinate PPE levels with them
    - At a minimum, Level C PPE should be worn

- Have fire and HAZMAT teams establish technical decontamination area for personnel, evidence, and equipment

- Be alert for perpetrators who may still be on the scene

- Request Special Weapons and Tactics (SWAT) team (as needed) to secure perimeters

- Conduct search, disarmament, and detonation of suspected devices

Special Weapons and Tactics Team

SWAT teams represent the law enforcement agency with the most training and diversity, operating in various specialized equipment under a variety of circumstances. As such, they are the most probable unit to perform specialized operations at a chemical incident, including operations inside the contaminated zones. Mission necessity, equipment, and training must always be considered prior to committing a team for operations in a contaminated environment.

- Establish communications with IC and police command
- Liaison with command post
- Assist with security
- Staging area for equipment
- Be alert for secondary devices
- Suspect detention and apprehension

- Coordinate for decontamination support if conducting mission inside warm and hot zones

Intelligence

Prior to the occurrence of a chemical incident, intelligence networks should be established between local, state, and federal agencies, including adjoining departments. WMD should become a standard element of their information gathering and intelligence sharing.

- Identify possible "theme" for attack
- Identify group(s) that may be responsible for attack
- Identify related events and other possible targets
- Determine if threat warrants notification and security for other related targets
- Conduct regional notifications of incident

Investigation

It can be expected that a deliberate chemical attack will be directed at a high-profile event involving a large number of people. As such, the number of potential witnesses can be in the hundreds or thousands. Identifying and locating everyone from the scene will be an enormous task for investigators.

- Witness interviews
- Suspect interrogations
- Identify locations where witnesses have been taken
  - Alternative treatment centers
  - Hospitals
- Public announcement to reach witnesses who departed area
- Establish hotline and tip line

Emergency Management

Not unlike a major natural disaster, a chemical incident will challenge all of the local and regional resources and involve a large state and federal response. Emergency managers are well prepared to deal with those disasters common to their area (e.g., tornados, floods, hurricanes, earthquakes), but a chemical incident presents its own unique challenges.

- Notify local, city, and county officials
- Coordinate with fire department and health department to establish a single point of contact (POC) for public release of information
- Establish Joint Operations Center (JOC) and Joint Information Center (JIC)
- Determine if incident exceeds local jurisdiction capabilities
- Notify state Emergency Management Agency (EMA)

- Make available resources, as needed
- Start compiling data for replenishment of losses and reimbursement of funds
- Work with EPA on environmental site cleanup
- Maintain communications with the Incident Command Post (ICP)

On-Scene Communications

- Need spare and replacement radios, batteries, chargers, and supplies
- Mutual-aid radios and frequencies for ability to communicate with multiple agencies and jurisdictions
- Hard wired telephones to relieve use of radios
- Wireless cellular telephones as an alternate to radio overload
- Hard wired or wireless fax machines:
  - Free up airtime use of radios
  - Send and receive information and resource list without being monitored or heard by others
- Vehicle or handheld computers
- Private and business owned two-way radios may be used to relieve overloaded emergency radios

- Message runners in the event of loss of radio communications

Media

Public Information Officer (PIO)

- Establish a PIO for the incident
- Establish a media staging and briefing area
- Maintain single contact person for release of information
- Schedule regular press releases
- Include key agency representatives in press releases to answer specific questions
- Use media for public service announcements

Pertinent Information for PIO

- Information on chemical agent
- Symptoms
- Number of people affected

- Size of the contaminated area
- Treatment for the agent
- Threat of spreading the contamination
- Directions that people who were not treated at the scene should follow
- Prognosis of the exposed victims

Media Arrival

- Local, national, and international
  - Radio stations
  - Television stations
  - Newspapers
  - Other news agencies
  - Tabloids

Public Notification

- Establish a single POC
- Release brief statement of the event

- Request the public not visit the area of the incident scene
- Provide the public information on:
  - Self-decontamination
  - Information on and directions to alternative treatment centers
  - Chronology of the event
  - Public safety information
  - Instructions for the victims
  - Locations that the public needs to avoid
- Give regular media and public updates